

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Amended). An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

a) ~~an amino acid sequence selected from the group consisting of SEQ ID NO: 1-25~~ SEQ ID NO: 9; and

b) ~~a naturally occurring~~ an amino acid sequence having at least 90% 95% sequence identity to ~~an amino acid sequence selected from the group consisting of SEQ IDNO: 1-25~~ SEQ ID NO: 9;

e) ~~a biologically active fragment of an amino acid sequence selected from the group consisting of SEQ ID NO: 1-25; and~~

~~d) an immunogenic fragment of an amino acid sequence selected from the group consisting of SEQ ID NO: 1-25.~~

Claim 2 (Amended). An isolated polypeptide of claim 1 ~~selected from the group consisting of SEQ IDNO: 1-25~~ comprising SEQ ID NO: 9.

Claim 3 (Amended). An isolated polynucleotide encoding a polypeptide ~~of claim 1 comprising an amino acid sequence selected from the group consisting of:~~

a) SEQ ID NO: 9; and

b) an amino acid sequence having at least 95% sequence identity to SEQ ID NO: 9.

Claim 4 (Amended). An isolated polynucleotide of claim 3 ~~selected from the group consisting of SEQ IDNO: 26-50~~ SEQ ID NO: 34.

Claim 5 (Original). A recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 3.

Claim 6 (Amended). ~~A~~ An isolated cell transformed with a recombinant polynucleotide of claim 5.

Claim 7 (Withdrawn). A transgenic organism comprising a recombinant polynucleotide of claim 5.

Claim 8 (Original). A method for producing a polypeptide of claim 1, the method comprising:

- a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 1, and
- b) recovering the polypeptide so expressed.

Claim 9 (Withdrawn). An isolated antibody which specifically binds to a polypeptide of claim 1.

Claim 10 (Amended). An isolated polynucleotide comprising a polynucleotide sequence selected from the group consisting of:

- a) ~~a polynucleotide sequence selected from the group consisting of SEQ ID NO: 26-50~~ SEQ ID NO: 34,
- b) ~~a naturally occurring~~ polynucleotide sequence having at least ~~90%~~ 95% sequence identity to ~~a polynucleotide sequence selected from the group consisting of SEQ ID NO: 26-50~~ SEQ ID NO: 34,
- c) a polynucleotide sequence complementary to a),
- d) a polynucleotide sequence complementary to b), and
- e) an RNA equivalent of a)-d).

Claim 11 (Original). An isolated polynucleotide comprising at least 60 contiguous nucleotides of a polynucleotide of claim 10.

Claim 12 (Withdrawn). A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 10, the method comprising:

- a) hybridizing the sample with a probe comprising at least 16 contiguous nucleotides comprising a sequence complementary to said target polynucleotide in the sample, and which probe specifically hybridizes to said target polynucleotide, under conditions whereby a hybridization complex is formed between said probe and said target polynucleotide, and
- b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof.

Claim 13 (Withdrawn). A method of claim 12, wherein the probe comprises at least 30 contiguous nucleotides.

Claim 14 (Withdrawn). A method of claim 12, wherein the probe comprises at least 60 contiguous nucleotides.

Claim 15 (Original). A pharmaceutical composition comprising an effective amount of a polypeptide of claim 1 and a pharmaceutically acceptable excipient.

Claim 16 (Withdrawn). A method for treating a disease or condition associated with decreased expression of functional EXMAD, comprising administering to a patient in need of such treatment the pharmaceutical composition of claim 15.

Claim 17 (Withdrawn). A method for screening a compound for effectiveness as an agonist of a polypeptide of claim 1, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 1 to a compound, and
- b) detecting agonist activity in the sample.

Claim 18 (Withdrawn). A pharmaceutical composition comprising an agonist compound identified by a method of claim 17 and a pharmaceutically acceptable excipient.

Claim 19 (Withdrawn). A method for treating a disease or condition associated with decreased expression of functional EXMAD, comprising administering to a patient in need of such treatment a pharmaceutical composition of claim 18.

Claim 20 (Withdrawn). A method for screening a compound for effectiveness as an antagonist of a polypeptide of claim 1, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 1 to a compound, and
- b) detecting antagonist activity in the sample.

Claim 21 (Withdrawn). A pharmaceutical composition comprising an antagonist compound identified by a method of claim 20 and a pharmaceutically acceptable excipient.

Claim 22 (Withdrawn). A method for treating a disease or condition associated with overexpression of functional EXMAD, comprising administering to a patient in need of such treatment a pharmaceutical composition of claim 21.

Claim 23 (Withdrawn). A method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a sequence of claim 4, the method comprising:

- a) exposing a sample comprising the target polynucleotide to a compound, and
- b) detecting altered expression of the target polynucleotide.